3.   (Original) The method of claim 1 further comprising:

rendering a representation of the three dimensional object from the data file; and

automatically translating the object to a corresponding view of interest

responsive to an actuation of a control associated with a corresponding representation.

4.   (Original) The method of claim 1 wherein the plurality of views includes all six

orthogonal views.

5.   (Original) The method of claim 1 further comprising:

automatically eliminating views with an information content below a threshold.

6.   (Original) The method of claim 5 wherein the information content is determined

relative to other views.

7.   (Original) The method of claim 1 further comprising:

permitting a user to create an additional access mechanism and associate a user

specified view with the additional access mechanism.

8.   (Original) The method of claim 1 further comprising:

automatically creating a sequence for presenting the plurality of views in a

prescribed manner.

9.   (Original) The method of claim 8 further comprising:

automatically presenting the sequence responsive to an event.

10.   (Original) The method of claim 1 wherein the characteristic is one of:

shape of the object, texture map of the object, indicia of the object, local detail of

the object, and color of the object.

11. (Original) The method of claim 1 wherein analyzing the data comprises:

detecting symmetry of the object; and

automatically determining a primary axis of orientation for presentation of the object.

12. (Original) The method of claim 1 wherein analyzing the data comprises:

automatically identifying homogenity exceptions in the object.

13. (Original) The method of claim 11 wherein analyzing the data further comprises:

determining volumetric distribution of features of the object.

14. (Original) A method comprising:

rendering a three dimensional representation of an object from a data file;

accepting a definition of a feature of interest;

searching the data file for a region substantially conforming to the definition; and

displaying an orientation and magnification that permits viewing of the feature.

15. (Original) The method of claim 14 wherein the definition is given by one of:

at least one stock criterion;

at least one user-specified criterion; and

a combination of user specified and stock criteria.

16. (Original) The method of claim 14 wherein the definition includes at least one of:

geometrical shape of the object, surface texture of the object, indicia of the object, and local detail of the object.

17. (Original) The method of claim 14 further comprising:

highlighting the feature of interest in the orientation and magnification displayed.

18. (Currently Amended) ~~A~~ The method of claim 14 further comprising:

tracking user behavior when viewing ~~a~~ the representation of ~~a~~ the three dimensional object;

inferring from the behavior a view of interest; and

defining an access mechanism to subsequently permit the view to be automatically accessed.

19. (Original) The method of claim 18 wherein the view includes a specific orientation and a specific magnification.

Claims 20-35 (Cancelled).

36. (Currently Amended) ~~A~~ The method of claim 1 further comprising:

displaying a representation of ~~a~~ the three dimensional object in a viewing window;

determining if movement of a control device is within a tolerance range; and

automatically constraining rotation of the representation to a single axis if the movement is within the tolerance range.

37. (Original) The method of claim 36 wherein the tolerance range is a function of recent activity.

38. (Currently Amended) ~~A~~ The method of claim 1 further comprising:

displaying a representation of ~~a~~ the three dimensional object in a viewing window; and

automatically providing a scale indicator that relates to an actual dimension of the three-dimensional object.

39.   (Original) The method of claim 38 wherein the scale indicator is one of dimension lines, coordinates, a grid, and a reference object.

40.   (Currently Amended) ~~A~~ The method of claim 1 further comprising:

displaying a representation of ~~a~~ the three dimensional object in a viewing window; and

automatically providing a color reference to allow for calibration of color of a display device.

41.   (Currently Amended) ~~A~~ The method of claim 1 further comprising:

displaying a representation of ~~a~~ the three dimensional object in a viewing window; and

automatically selecting a display background based on at least one characteristic of the object.

42.   (Currently Amended) ~~A~~ The method of claim 1 further comprising:

analyzing a data file representing ~~a~~ the three dimensional object to automatically identify at least one observable characteristic of the three dimensional object;

rendering a representation of ~~a~~ the three dimensional object from the data file; and

automatically adjusting a virtual light source to light the representation to improve visibility of a characteristic of interest.

43.   (Original) A machine readable medium having stored thereon instructions which when executed by a processor cause the machine to perform operations comprising:

analyzing a data file representing a three dimensional object to automatically identify a plurality of views of interest based on at least one observable characteristic of the three dimensional object; and

defining an access mechanism to permit the plurality of views to be accessed.

44.   (Original) A machine readable medium having stored thereon instructions which when executed by a processor cause the machine to perform operations comprising:

rendering a three dimensional representation of an object from a data file;

accepting a definition of a feature of interest;

searching the data file for a region substantially conforming to the definition; and

displaying an orientation and magnification that permits viewing of the feature.

45.   (Currently Amended) A machine readable medium of claim 43 having stored thereon further instructions which when executed by a processor cause the machine to perform operations comprising:

tracking user behavior when viewing a representation of a the three dimensional object;

inferring from the behavior a view of interest; and

defining an access mechanism to subsequently permit the view to be automatically accessed.

46.   (Currently Amended) ~~A~~ The machine readable medium of claim 43 having stored thereon further instructions which when executed by a processor cause the machine to perform operations comprising:

displaying a representation of ~~a~~ the three dimensional object in a viewing window;

determining if movement of a control device is within a tolerance range; and

automatically constraining rotation of the representation to a single axis if the movement is within the tolerance range.